



STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY  
DIVISION OF AIR POLLUTION CONTROL  
2200 CHURCHILL ROAD  
SPRINGFIELD, ILLINOIS 62706

APPLICATION FOR A PERMIT (A) <input type="checkbox"/> CONSTRUCT <input checked="" type="checkbox"/> OPERATE		FOR AGENCY USE ONLY	
NAME OF EQUIPMENT TO BE CONSTRUCTED OR OPERATED		I. D. NO. _____ PERMIT NO. _____ DATE _____	
Gas and Oil Fired Boilers No. 4 and No. 5 (B)			

1a. NAME OF OWNER: Caterpillar Tractor Co.		2a. NAME OF OPERATOR: Caterpillar Tractor Co.	
1b. STREET ADDRESS OF OWNER: Box 348		2b. STREET ADDRESS OF OPERATOR: Box 348	
1c. CITY OF OWNER: Aurora		2c. CITY OF OPERATOR: Aurora	
1d. STATE OF OWNER: Illinois	1e. ZIP CODE: 60507	2d. STATE OF OPERATOR: Illinois	2e. ZIP CODE: 60507

NAME OF CORPORATE DIVISION OR PLANT: Caterpillar Tractor Co., Aurora Plant		3b. STREET ADDRESS OF EMISSION SOURCE: Route 31	
3c. CITY OF EMISSION SOURCE: Montgomery	3d. LOCATED WITHIN CITY LIMITS: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	3e. TOWNSHIP: Oswego	3f. COUNTY: Kendall
		3g. ZIP CODE: 60507	

4. ALL CORRESPONDENCE TO: (NAME OF INDIVIDUAL) Robert C. Dryden		5. TELEPHONE NUMBER FOR AGENCY TO CALL: (312) 859-5000	
6. ADDRESS FOR CORRESPONDENCE: (CHECK ONLY ONE) <input type="checkbox"/> OWNER: <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> EMISSION SOURCE		7. YOUR ID NUMBER FOR THIS APPLICATION: (C) BLR 4 & 5	

8. THE UNDERSIGNED HEREBY MAKES APPLICATION FOR A PERMIT AND CERTIFIES THAT THE STATEMENTS CONTAINED HEREIN ARE TRUE AND CORRECT, AND FURTHER CERTIFIES THAT ALL PREVIOUSLY SUBMITTED INFORMATION REFERENCED IN THIS APPLICATION REMAINS TRUE, CORRECT AND CURRENT, BY AFFIXING HIS SIGNATURE HERETO HE FURTHER CERTIFIES THAT HE IS AUTHORIZED TO EXECUTE THIS APPLICATION.

AUTHORIZED SIGNATURE(S): (D)

BY SIGNATURE _____ DATE _____ Robert C. Dryden TYPED OR PRINTED NAME OF SIGNER Plant Manager TITLE OF SIGNER	BY SIGNATURE _____ DATE _____ TYPED OR PRINTED NAME OF SIGNER TITLE OF SIGNER
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**RECEIVED**  
AUG 08 1979  
EPA-DAPC-SPFLD

(A) THIS FORM IS TO PROVIDE THE AGENCY WITH GENERAL INFORMATION ABOUT THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. THIS FORM MAY ONLY BE USED TO REQUEST ONE TYPE OF PERMIT - CONSTRUCTION OR OPERATION - AND NOT BOTH.

(B) CLEARLY IDENTIFY THE GENERIC NAME OF THE EQUIPMENT TO BE CONSTRUCTED OR OPERATED. SUCH IDENTIFICATION WILL APPEAR ON THE PERMIT WHICH MAY BE ISSUED PURSUANT TO THIS APPLICATION. THIS FORM MUST BE ACCOMPANIED BY THE APPLICABLE FEE.

(C) PROVIDE A NUMBER IN ITEM 7 ABOVE WHICH YOU WOULD LIKE THE AGENCY TO USE FOR IDENTIFICATION OF YOUR EQUIPMENT. YOUR IDENTIFICATION NUMBER WILL BE REFERENCED IN ALL CORRESPONDENCE, RELATIVE TO THIS APPLICATION, FROM THIS AGENCY. YOUR IDENTIFICATION NUMBER MUST NOT EXCEED TEN (10) CHARACTERS.

(D) THIS APPLICATION MUST BE SIGNED IN ACCORDANCE WITH PCB REGS., CHAPTER 2, PART 1, RULE 103(a)(4) OR 103(b)(5) WHICH STATES: "ALL APPLICATIONS AND SUPPLEMENTS THERETO SHALL BE SIGNED BY THE OWNER AND OPERATOR OF THE EMISSION SOURCE OR AIR POLLUTION CONTROL EQUIPMENT, OR THEIR AUTHORIZED AGENT, AND SHALL BE ACCOMPANIED BY EVIDENCE OF AUTHORITY TO SIGN THE APPLICATION."

IF THE OWNER OR OPERATOR IS A CORPORATION, SUCH CORPORATION MUST HAVE ON FILE WITH THE AGENCY A CERTIFIED COPY OF A RESOLUTION OF THE CORPORATION'S BOARD OF DIRECTORS AUTHORIZING THE PERSONS SIGNING THIS APPLICATION TO CAUSE OR ALLOW THE CONSTRUCTION OR OPERATION OF THE EQUIPMENT TO BE COVERED BY THE PERMIT.

## 9. DOES THIS APPLICATION CONTAIN A PLOT PLAN/MAP:

☒ YES ☐ NO

IF A PLOT PLAN/MAP HAS PREVIOUSLY BEEN SUBMITTED, SPECIFY:

AGENCY I.D. NUMBER \_\_\_\_\_

APPLICATION NUMBER \_\_\_\_\_

IS THE APPROXIMATE SIZE OF APPLICANT'S PREMISES LESS THAN 1 ACRE?

☐ YES ☒ NO: SPECIFY 390 ACRES

## 10. DOES THIS APPLICATION CONTAIN A PROCESS FLOW DIAGRAM(S) THAT ACCURATELY AND CLEARLY REPRESENTS CURRENT PRACTICE.

☒ YES ☐ NO

## 11a. WAS ANY EQUIPMENT, COVERED BY THIS APPLICATION, OWNED OR CONTRACTED FOR, BY THE APPLICANT PRIOR TO APRIL 14, 1972:

☒ YES ☐ NO

IF "YES", ATTACH AN ADDITIONAL SHEET, EXHIBIT A, THAT:

- (a) LISTS OR DESCRIBES THE EQUIPMENT
- (b) STATES WHETHER THE EQUIPMENT WAS IN COMPLIANCE WITH THE RULES AND REGULATIONS GOVERNING THE CONTROL OF AIR POLLUTION PRIOR TO APRIL 14, 1972.

## 11b. IS ANY EQUIPMENT, COVERED BY THIS APPLICATION, EQUIPMENT FOR WHICH AN OPERATING PERMIT HAS NOT PREVIOUSLY BEEN RECEIVED:

☒ YES ☐ NO

IF "YES", ATTACH AN ADDITIONAL SHEET, EXHIBIT B, THAT:

- (a) LISTS OR DESCRIBES THE EQUIPMENT
- (b) STATES WHETHER THE EQUIPMENT
  - (i) IS ORIGINAL OR ADDITIONAL EQUIPMENT
  - (ii) REPLACES EXISTING EQUIPMENT, OR
  - (iii) MODIFIES EXISTING EQUIPMENT
- (c) PROVIDES THE ANTICIPATED OR ACTUAL DATE OF START-UP OF THE EQUIPMENT

## 12. IF THIS APPLICATION INCORPORATES BY REFERENCE A PREVIOUSLY GRANTED PERMIT(S), HAS FORM APC-210, "DATA AND INFORMATION—INCORPORATION BY REFERENCE" BEEN COMPLETED.

☒ YES ☐ NO

## 13. DOES THE STARTUP OF AN EMISSION SOURCE COVERED BY THIS APPLICATION PRODUCE AIR CONTAMINANT EMISSION IN EXCESS OF APPLICABLE STANDARDS:

☐ YES ☒ NO

IF "YES," HAS FORM APC-203, "OPERATION DURING STARTUP" BEEN COMPLETED FOR THIS SOURCE:

☐ YES ☐ NO

## 14. DOES THIS APPLICATION REQUEST PERMISSION TO OPERATE AN EMISSION SOURCE DURING MALFUNCTIONS OR BREAKDOWNS:

☐ YES ☒ NO

IF "YES," HAS FORM APC-204, "OPERATION DURING MALFUNCTION AND BREAKDOWN" BEEN COMPLETED FOR THIS SOURCE:

☐ YES ☐ NO

## 15. IS AN EMISSION SOURCE COVERED BY THIS APPLICATION SUBJECT TO A FUTURE COMPLIANCE DATE:

☐ YES ☒ NO

IF "YES," HAS FORM APC-202, "COMPLIANCE PROGRAM &amp; PROJECT COMPLETION SCHEDULE," BEEN COMPLETED FOR THIS SOURCE:

☐ YES ☐ NO

## 16. DOES THE FACILITY COVERED BY THIS APPLICATION REQUIRE AN EPISODE ACTION PLAN (REFER TO GUIDELINES FOR EPISODE ACTION PLANS):

☒ YES ☐ NO

## 17. WAS THIS OPERATION THE SUBJECT OF A VARIANCE PETITION FILED WITH THE ILLINOIS POLLUTION CONTROL BOARD ON OR BEFORE JUNE 13, 1972:

☐ YES ☒ NO

IF "YES," CITE: PCB NUMBER(S) \_\_\_\_\_, DATE OF BOARD ORDER \_\_\_\_\_

WAS CONSTRUCTION OR MODIFICATION OF EQUIPMENT, SUFFICIENT TO ACHIEVE COMPLIANCE WITH THE "RULES AND REGULATIONS GOVERNING THE CONTROL OF AIR POLLUTION" EFFECTIVE PRIOR TO APRIL 14, 1972, COMMENCED PRIOR TO APRIL 14, 1972:

☐ YES ☐ NO

IF "YES," EXPLAIN IN DETAIL, AND IDENTIFY EXPLANATION AS EXHIBIT D.

APPLICATION FOR OPERATING PERMIT ONLY

## 18. LIST AND IDENTIFY ALL FORMS, EXHIBITS, AND OTHER INFORMATION SUBMITTED AS PART OF THIS APPLICATION. INCLUDE THE PAGE NUMBERS ON EACH ITEM (ATTACH ADDITIONAL SHEETS IF NECESSARY):

Page No.

Forms or Exhibits

1,2

APC 200

3

Drawing No. 1

4

Drawing No. 2

5

Exhibit A

6

Exhibit B

7,8,9

APC 240

10

Exhibit C

11

Exhibit D

12,13

APC 232

14

APC 210

TOTAL NUMBER OF PAGES 14

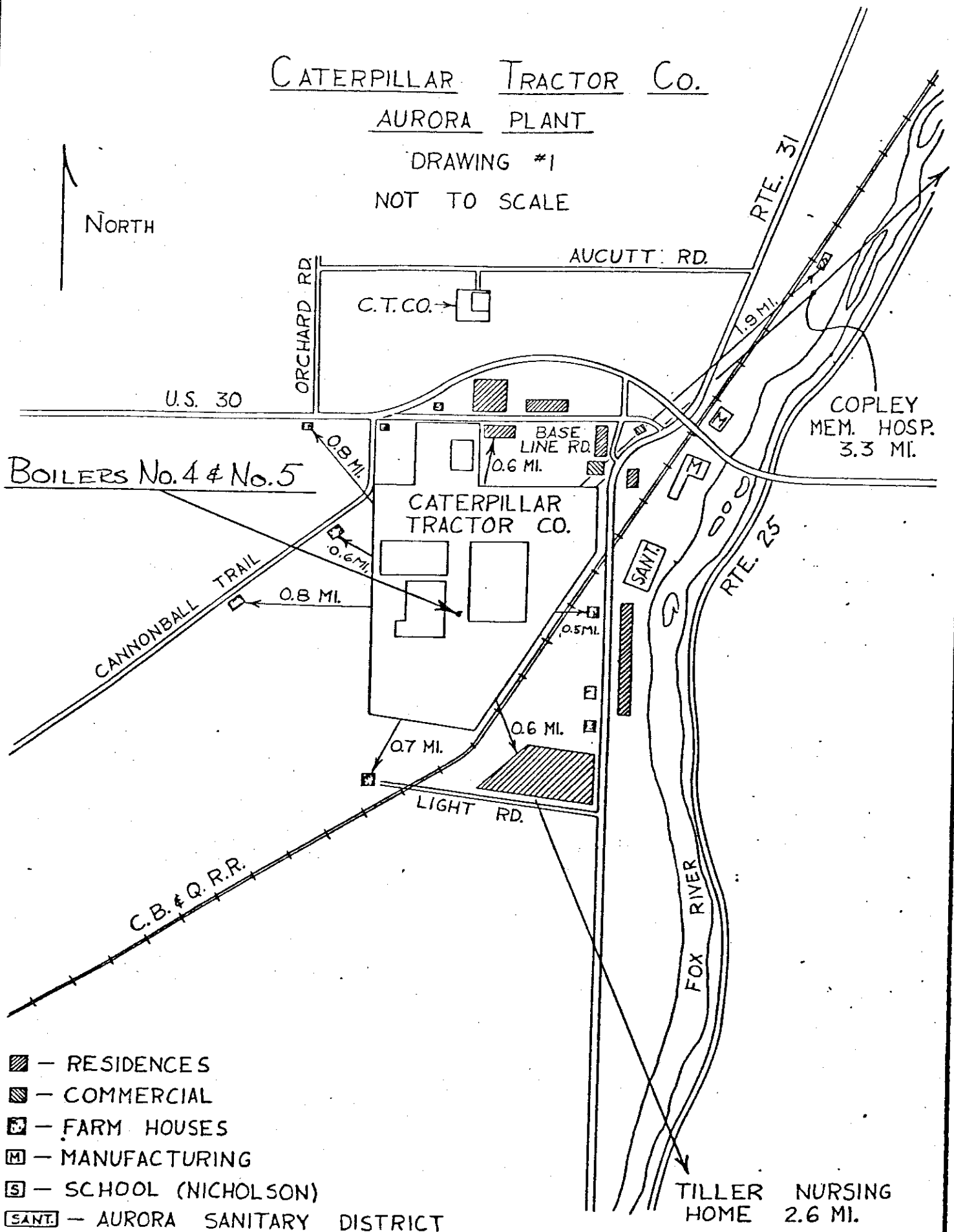
# CATERPILLAR TRACTOR CO.

## AURORA PLANT

DRAWING #1

NOT TO SCALE

NORTH



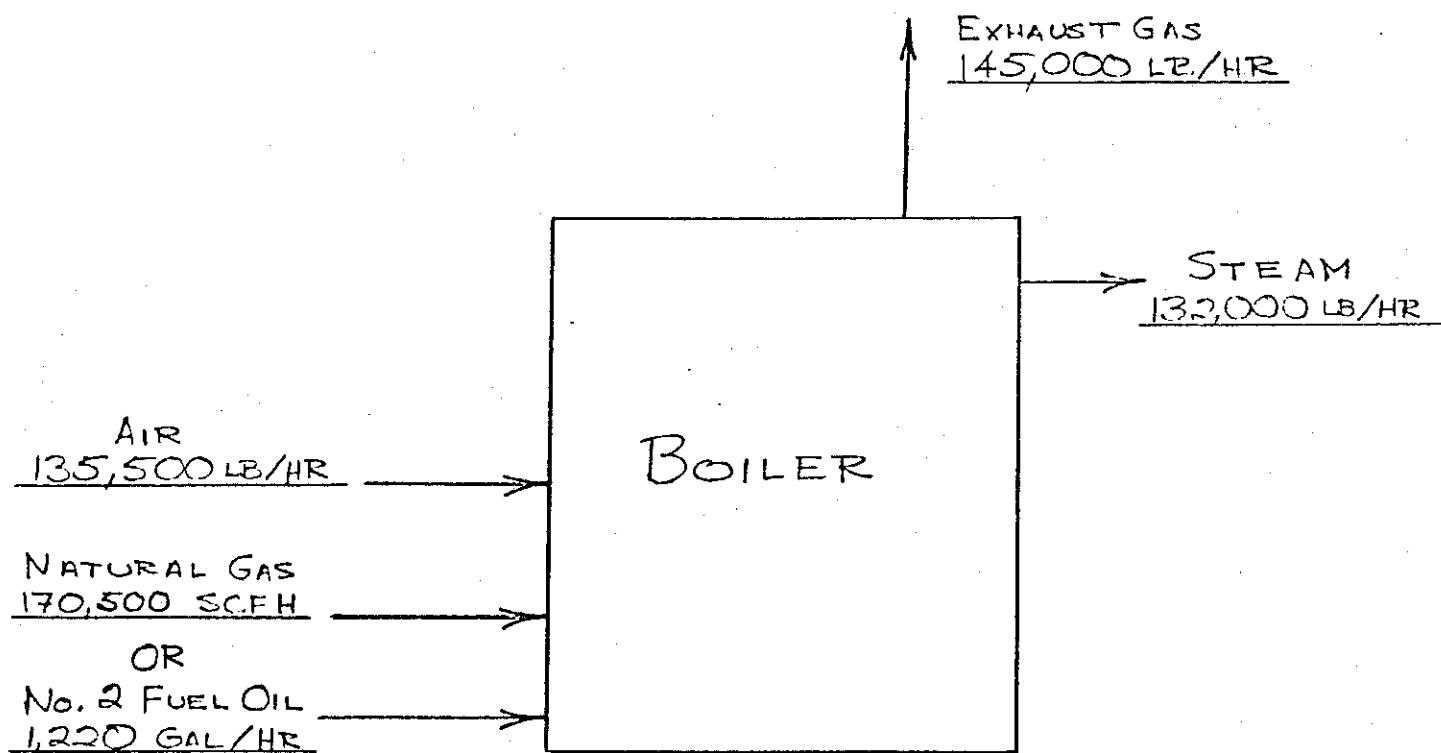
DRAWING No. 2

Exhibit A

- (a) Boilers No. 4 and 5 are identical boilers that were erected in 1967. Both boilers are currently natural gas fired.

The basic equipment data are as follows:

Manufacturer ..... Combustion Engineering, Inc.

Model ..... Type "A"

Steam ..... 150 PSIG Saturated

Rating ..... 120,000 lbs/hr Maximum Continuous  
132,000 lbs/hr peak.

- (b) Yes, this equipment was in compliance with the rules and regulations governing the control of air pollution prior to April 14, 1972.

Exhibit B

- (a) In addition to the existing natural gas firing capabilities of Boilers No. 4 and No. 5, fuel oil firing will be added in order to provide dual fuel capability. Natural gas will continue to be the primary fuel, and oil will serve as backup in the event that natural gas is curtailed.

The additional equipment are as follows:

- 1) One (1) million gallon fuel oil storage tank.
  - 2) Duplex pump set.
  - 3) Duplex heater set.
  - 4) Four (4) sets of atomizing guns for both boilers.
  - 5) Two (2) boiler control panels.
- (b) The aforementioned equipment shall be considered as additional equipment; the steaming rate of either boiler is unaffected by this equipment.
- (c) The fully debugged start-up date for this equipment is anticipated to be the Fourth Quarter of 1979.



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\*DATA AND INFORMATION

FUEL COMBUSTION EMISSION SOURCE

Gas and Oil Fired Boilers No. 4 and 5

\*THIS INFORMATION FORM IS TO BE COMPLETED FOR A FURNACE, BOILER, OR SIMILAR EQUIPMENT USED FOR THE PRIMARY PURPOSE OF PRODUCING HEAT OR POWER BY INDIRECT HEAT TRANSFER. AN EMISSION SOURCE THAT DOES NOT FIT THIS DESCRIPTION, INCLUDING AN EMISSION SOURCE USING DIRECT HEATING, IS EITHER A PROCESS EMISSION SOURCE OR AN INCINERATOR.

1. NAME OF OWNER: Caterpillar Tractor Co.	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): Caterpillar Tractor Co., Aurora Plt
3. STREET ADDRESS OF EMISSION SOURCE: Route 31	4. CITY OF EMISSION SOURCE: Montgomery

GENERAL INFORMATION

5. FLOW DIAGRAM DESIGNATION(S) OF EMISSION SOURCE: See Drawing No. 2		
6. MANUFACTURER: Combustion Engineering, Inc.	7. MODEL NUMBER: Type "A"	8. SERIAL NUMBER: 11028, 9
9. AVERAGE OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 36 WKS/YR	10. MAXIMUM OPERATING TIME OF EMISSION SOURCE: 24 HRS/DAY 7 DAYS/WK 49 WKS/YR	
11. PERCENT OF ANNUAL HEAT INPUT: DEC-FEB 40 % MAR-MAY 25 % JUN-AUG 10 % SEP-NOV 25 %		

INSTRUCTIONS

1. COMPLETE THE ABOVE IDENTIFICATION AND GENERAL INFORMATION SECTION.
2. COMPLETE THE APPROPRIATE FUEL SECTION OR SECTIONS. IF MORE THAN ONE FUEL IS FIRED OR IF THE CAPABILITY EXISTS TO FIRE MORE THAN ONE FUEL, THE ACTUAL USAGE OF FUELS AND THE RELATIONSHIP BETWEEN FUELS, SIMULTANEOUS FIRING, ALTERNATE FIRING, RESERVE FUEL, ETC., MUST BE MADE CLEAR.
3. EMISSION AND EXHAUST POINT INFORMATION MUST BE COMPLETED, UNLESS EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT.
4. FIRING RATES AND CERTAIN OTHER ITEMS REQUIRE BOTH AVERAGE AND MAXIMUM VALUES.
5. FOR GENERAL INFORMATION REFER TO "GENERAL INSTRUCTIONS FOR PERMIT APPLICATIONS," APC-201.

DEFINITIONS

AVERAGE - THE VALUE THAT SUMMARIZES OR REPRESENTS THE GENERAL CONDITION OF THE EMISSION SOURCE, OR THE GENERAL STATE OF HEAT PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:

AVERAGE OPERATING TIME - ACTUAL TOTAL HOURS OF OPERATION FOR THE PRECEDING TWELVE MONTH PERIOD.

AVERAGE RATE - ACTUAL TOTAL QUANTITY OF "MATERIAL" FOR THE PRECEDING TWELVE MONTH PERIOD, DIVIDED BY THE AVERAGE OPERATING TIME.

AVERAGE OPERATION - OPERATION TYPICAL OF THE PRECEDING TWELVE MONTH PERIOD, AS REPRESENTED BY AVERAGE OPERATING TIME AND AVERAGE RATES.

MAXIMUM - THE GREATEST VALUE ATTAINABLE OR ATTAINED FROM THE EMISSION SOURCE, OR THE PERIOD OF GREATEST OR UTMOST HEAT PRODUCTION OF THE EMISSION SOURCE. SPECIFICALLY:

MAXIMUM OPERATING TIME - GREATEST EXPECTED TOTAL HOURS OF OPERATION FOR ANY TWELVE MONTH PERIOD.

MAXIMUM RATE - GREATEST QUANTITY OF "MATERIAL" EXPECTED PER ANY ONE HOUR OF OPERATION.

MAXIMUM OPERATION - GREATEST EXPECTED OPERATION, AS REPRESENTED BY MAXIMUM OPERATING TIME AND MAXIMUM RATES.

## GAS FIRING

*11. ORIGIN OF GAS: <input checked="" type="checkbox"/> PIPELINE <input type="checkbox"/> DISTILLATE FUEL OIL GASIFICATION <input type="checkbox"/> OTHER LIQUID FUEL GASIFICATION <input type="checkbox"/> SOLID FUEL GASIFICATION <input type="checkbox"/> BYPRODUCT: SPECIFY SOURCE			
12. ARE YOU ON AN INTERRUPTABLE GAS SUPPLY: <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF "YES", SPECIFY ALTERNATE FUEL: _____			
13. ANNUAL CONSUMPTION: 544,000,000 SCF		* 14. HEAT CONTENT: 1034 BTU/SCF	
16. AVERAGE FIRING RATE: 90,000,000 BTU/HR		* 15. SULFUR CONTENT: 0.0015 %BY WT.	
		17. MAXIMUM FIRING RATE: 176,300,000 BTU/HR	

\*IF THE GAS FIRED IS NATURAL GAS, THESE ITEMS NEED NOT BE COMPLETED.

## OIL FIRING

18. TYPE OF OIL: GRADE NUMBER: <input type="checkbox"/> 1 <input checked="" type="checkbox"/> 2 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 OTHER: SPECIFY _____			
19. ANNUAL CONSUMPTION: 7,379,000 * GALLONS		20. HEAT CONTENT: 139,400 <input type="checkbox"/> BTU/LB <input checked="" type="checkbox"/> BTU/GAL	
21. SULFUR CONTENT: 0.26 %BY WT		22. ASH CONTENT: 0.05 %BY WT	
DIRECTION OF FIRING: <input type="checkbox"/> TANGENTIAL <input type="checkbox"/> OTHER: SPECIFY _____			
RATE: 90,000,000 BTU/HR *		25. MAXIMUM FIRING RATE: 176,300,000 BTU/HR *	

\* - If natural gas is curtailed, oil will be used in place of the gas to fire the boiler.

## SOLID FUEL FIRING

26. TYPE OF SOLID FUEL: <input type="checkbox"/> SUB-BITUMINOUS COAL <input type="checkbox"/> BITUMINOUS COAL <input type="checkbox"/> ANTHRACITE COAL <input type="checkbox"/> OTHER: SPECIFY _____			
27. ANNUAL CONSUMPTION: TONS		28. HEAT CONTENT AS FIRED: BTU/LB	
29. MOISTURE CONTENT AS FIRED: %BY WT	30. ASH CONTENT AS FIRED: %BY WT	31. SULFUR CONTENT AS FIRED: %BY WT	
32. TYPE OF FIRING: <input type="checkbox"/> CYCLONE <input type="checkbox"/> PULVERIZED { <input type="checkbox"/> WET BOTTOM OR <input type="checkbox"/> DRY BOTTOM, <input type="checkbox"/> HORIZONTALLY OPPOSED OR <input type="checkbox"/> OTHER: SPECIFY _____ <input type="checkbox"/> SPREADER STOKER: % REINJECTION _____ <input type="checkbox"/> OTHER: SPECIFY _____			
33. AVERAGE FIRING RATE: BTU/HR		34. MAXIMUM FIRING RATE: BTU/HR	
SUBMIT COPIES OF THOSE PORTIONS OF COAL OR OTHER SOLID FUEL CONTRACTS WHICH SET FORTH THE SPECIFICATIONS OF THE FUEL AND THE DURATION OF THE CONTRACT. IF THE ACTUAL FUEL FIRED IS A BLEND OF SOLID FUELS, SUBMIT APPROPRIATE PORTIONS OF ALL FUEL CONTRACTS AND SET FORTH THE MANNER IN WHICH THE FUELS ARE BLENDED AND ACTUALLY FIRED. REFERENCE THIS INFORMATION TO THIS FORM.			



## \*EMISSION INFORMATION

(Oil Firing Only)

## 35. NUMBER OF IDENTICAL SOURCES (DESCRIBE AS REQUIRED):

Two (2) sources, each having its own stack.

## AVERAGE OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE	
PARTICULATE MATTER	36a.	GR/SCF	b. 0.026 <input checked="" type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c. See Exhibit C.
CARBON MONOXIDE	37a.	PPM (VOL)	b. <input type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c.
NITROGEN OXIDES	38a.	PPM (VOL)	b. <input type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c.
ORGANIC MATERIAL	39a.	PPM (VOL)	b. <input type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c.
SULFUR DIOXIDE	40a.	PPM (VOL)	b. 0.26 <input checked="" type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c. AP-42, 1-7 (See Exhibit D)

## MAXIMUM OPERATION

CONTAMINANT	CONCENTRATION OR EMISSION RATE PER IDENTICAL SOURCE		METHOD USED TO DETERMINE CONCENTRATION OR EMISSION RATE	
PARTICULATE MATTER	41a.	GR/SCF	b. 0.026 <input checked="" type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c. See Exhibit C.
CARBON MONOXIDE	42a.	PPM (VOL)	b. <input type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c.
NITROGEN OXIDES	43a.	PPM (VOL)	b. <input type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c.
ORGANIC MATERIAL	44a.	PPM (VOL)	b. <input type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c.
SULFUR DIOXIDE	45a.	PPM (VOL)	b. 0.26 <input checked="" type="checkbox"/> LB/10 <sup>6</sup> BTU <input type="checkbox"/> LB/HR	c. AP-42, 1-7 (See Exhibit D)

\*IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT, OR IF NATURAL GAS IS THE FUEL FIRED, ITEMS 36 THROUGH 47 NEED NOT BE COMPLETED.

## \*\*EXHAUST POINT INFORMATION

46. FLOW DIAGRAM DESIGNATION(S) OF EXHAUST POINT: See Drawing No. 2	
47. DESCRIPTION OF EXHAUST POINT (LOCATION IN RELATION TO BUILDINGS, DIRECTION, HOODING, ETC.): Unobstructed vertical stack; see drawing No. 1 for location.	
48. EXIT HEIGHT ABOVE GRADE: 71 Ft.	50. EXIT DIAMETER: 5.5 Ft.
49. GREATEST HEIGHT OF NEARBY BUILDINGS: 50 FT	51. EXIT DISTANCE FROM NEAREST PLANT BOUNDARY: 1600 FT
AVERAGE OPERATION	
52. EXIT GAS TEMPERATURE: 315 °F	54. EXIT GAS TEMPERATURE: 335 °F
53. GAS FLOW RATE THROUGH EACH EXIT: 131,800 lb/hr <del>XXXX</del>	55. GAS FLOW RATE THROUGH EACH EXIT: 145,000 lb/hr <del>XXXX</del>

\*\*IF EMISSIONS ARE EXHAUSTED THROUGH AIR POLLUTION CONTROL EQUIPMENT THIS SECTION SHOULD NOT BE COMPLETED.

Exhibit C

Particulate Emission Calculation:

$$(0.05\% \text{ Ash}) (53.5 \text{ Lbs/Ft}^3) (0.1337 \text{ Ft}^3/\text{Gal}) = 0.00358 \text{ Lbs/Gal.}$$

$$(0.00358 \text{ Lbs/Gal}) / (139,400 \text{ BTU/Gal}) = \underline{0.026 \text{ Lbs}/10^6 \text{ BTU.}}$$

Exhibit D

Sulfur Dioxide Emission Calculation:

$$(142 \text{ lbs}/1000 \text{ gals.}) \overset{*}{(0.26\% \text{ S})} = 0.0369 \text{ lbs./gal.}$$

$$(0.0369 \text{ lbs./gal.}) / (139,400 \text{ BTU/gal.}) = \underline{0.26 \text{ lbs.}/10^6 \text{ BTU}}$$

\* - Emission factor from U.S. EPA 42, Page 1-7, Table 1-5,  
for Industrial Boilers Burning Distillate Fuel Oil.



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DIVISION OF AIR POLLUTION CONTROL  
2200 CHURCHILL ROAD  
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PROCESS EMISSION SOURCE ADDENDUM	FOR AGENCY USE ONLY
TANK	
Fuel Oil Tank	

1. NAME OF OWNER: Caterpillar Tractor Co.	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): Caterpillar Tractor Co., Aurora Plant
3. STREET ADDRESS OF EMISSION SOURCE: Route 31	4. CITY OF EMISSION SOURCE: Montgomery

TANK INFORMATION			
5. NAME OF TANK MANUFACTURER: Pittsburgh - Des Moines Steel Company		6. DESIGNATION OF TANK: Fuel Oil Tank	
7. SERIAL NUMBER: 26651		8. CAPACITY: 1,000,000 gallons	
9. TANK USE: Fuel Oil Storage		10. NUMBER OF SAME CAPACITY TANKS STORING SAME MATERIAL: 0	
11. TANK SHAPE: <input type="checkbox"/> HORIZONTAL <input checked="" type="checkbox"/> CYLINDRICAL <input type="checkbox"/> SPHERICAL <input type="checkbox"/> OTHER(SPECIFY) _____			
12. TANK DIAMETER: 60 FT		13. TANK HEIGHT: 48 FT	
		14. TANK LENGTH: --- FT	
15. STATUS: <input type="checkbox"/> EXISTING <input type="checkbox"/> ALTERATION		16. TANK TYPE: <input checked="" type="checkbox"/> FIXED ROOF <input type="checkbox"/> FLOATING ROOF <input type="checkbox"/> PRESSURE <input type="checkbox"/> OTHER(SPECIFY) _____	
17. SEAL: <input type="checkbox"/> SINGLE <input type="checkbox"/> DOUBLE <input checked="" type="checkbox"/> OTHER (SPECIFY) None		18. AVERAGE DISTANCE FROM TOP OF TANK SHELL TO LIQUID: 4 FT.	
19. SHELL TYPE: <input type="checkbox"/> RIVETED <input checked="" type="checkbox"/> WELDED <input type="checkbox"/> OTHER(SPECIFY) _____		20. PAINT COLOR: White	

VENT VALVE DATA			
TYPE OF VENT	NUMBER OF VENTS	PRESSURE SETTING	DISCHARGE VENTED TO (ATMOSPHERE, FLARE, ETC.)
21. COMBINATION	a.	b. PSIG	c.
22. PRESSURE	a.	b. PSIG	c.
23. VACUUM	a.	b. PSIG	c.
24. OPEN	a. 2	b. 0 PSIG	c. Atmosphere

MATERIAL TO BE STORED

MATERIAL: No. 2 Fuel Oil	26. DENSITY: 53.5 LB/FT <sup>3</sup>	27. VAPOR PRESSURE AT 70°F: < 1.0 PSIA
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STORAGE CONDITIONS (Reserve Fuel)

28. STORAGE TEMPERATURE: MINIMUM <u>-10</u> °F MAXIMUM <u>100</u> °F	29. TANK TURN OVER PER YEAR: <input type="checkbox"/> BBLS/ <input type="checkbox"/> GALS/
30. MAXIMUM FILLING RATE: <input type="checkbox"/> BBLS/DAY <input type="checkbox"/> GALS/DAY	31. AVERAGE THROUGHPUT: <input type="checkbox"/> BBLS/DAY <input type="checkbox"/> GALS/DAY
32. PRESSURE EQUALIZERS USED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	33. PERMANENT SUBMERGED LOADING PIPE USED? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
34. VAPOR LOSS CONTROL DEVICE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	IF VAPOR LOSS CONTROL DEVICE IS USED, COMPLETE "DATA & INFORMATION -- AIR POLLUTION CONTROL EQUIPMENT," (FORM APC-260), AS PART OF THIS APPLICATION.



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DATA AND INFORMATION	FOR AGENCY USE ONLY
INCORPORATION BY REFERENCE	

1. NAME OF OWNER: Caterpillar Tractor Co.	2. NAME OF CORPORATE DIVISION OR PLANT (IF DIFFERENT FROM OWNER): Caterpillar Tractor Co., Aurora Plant
3. STREET ADDRESS OF EMISSION SOURCE: Route 31	4. CITY OF EMISSION SOURCE: Montgomery
5. IDENTIFICATION NUMBER: <u>0</u> <u>9</u> <u>3</u> <u>8</u> <u>0</u> <u>7</u> <u>A</u> <u>A</u> <u>B</u>	

6a. APPLICATION NUMBER: 03021182		b. IDENTIFICATION ON FLOW DIAGRAM: Gas Fired Boilers No. 4 and No. 5	
<input type="checkbox"/> CONSTRUCTION OF Gas Boilers No. 4 and No. 5 <input checked="" type="checkbox"/> OPERATION			
d. DOES THE DATA & INFORMATION PREVIOUSLY SUBMITTED REMAIN TRUE, CORRECT, CURRENT & COMPLETE? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
e. IF "NO," SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & INFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE.			

7a. APPLICATION NUMBER:	b. IDENTIFICATION ON FLOW DIAGRAM:
c. <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> OPERATION OF _____	
d. DOES THE DATA & INFORMATION PREVIOUSLY SUBMITTED REMAIN TRUE, CORRECT, CURRENT & COMPLETE? <input type="checkbox"/> YES <input type="checkbox"/> NO	
e. IF "NO," SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & INFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE.	

8a. APPLICATION NUMBER:	b. IDENTIFICATION ON FLOW DIAGRAM:
c. <input type="checkbox"/> CONSTRUCTION <input type="checkbox"/> OPERATION OF _____	
d. DOES THE DATA & INFORMATION PREVIOUSLY SUBMITTED REMAIN TRUE, CORRECT, CURRENT & COMPLETE? <span style="float: right;"> <input type="checkbox"/> YES      <input type="checkbox"/> NO         </span>	
e. IF "NO," SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & INFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE.	

9a. APPLICATION NUMBER: _____	b. IDENTIFICATION ON FLOW DIAGRAM: _____
<div style="display: flex; justify-content: space-between;"> <span><input type="checkbox"/> CONSTRUCTION</span> <span><input type="checkbox"/> OPERATION</span> </div> OF _____	
d. DOES THE DATA & INFORMATION PREVIOUSLY SUBMITTED REMAIN TRUE, CORRECT, CURRENT & COMPLETE? <span style="float: right;"><input type="checkbox"/> YES <input type="checkbox"/> NO</span>	
e. IF "NO," SUBMIT THE APPLICABLE FORMS OR CLEARLY STATE THE DATA & INFORMATION WHICH IS NO LONGER TRUE, CORRECT, CURRENT AND COMPLETE.	